

POLY-GUARD® FDA

High Performance FDA / USDA H-1 Oil



Beyond Synthetic™

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Poly-Guard® FDA is recommended for use in compressors, pumps, gear boxes, bearings, hydraulic systems, blowers or almost any other equipment in food processing or pharmaceutical plants requiring oil.

Poly-Guard® FDA is a superior anti-wear, long life, synthetic lubricant that is USDA H-1 approved and meets the FDA CFR Title 21 Section 178.3620(b) purity requirement. Poly-Guard® FDA reduces wear and keeps equipment cleaner, allowing for substantially longer oil drain intervals. Using Poly-Guard® FDA saves money, minimizes inventory, reduces maintenance, improves equipment efficiency and extends equipment life. It is available in ISO viscosity grades 15 through 680.

Purolec® additive technology makes the difference!

Synthetic oils enable Royal Purple to make superior FDA / USDA H-1 lubricants, but it is Royal Purple's advanced Purolec® additive technology that gives Royal Purple's lubricants their superior performance advantages.

Purolec® additive technology provides outstanding anti-wear properties while providing excellent rust and corrosion protection to all metals. Purolec® additive technology also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.

Performance Advantages:

- **Excellent Wear Protection**
Poly-Guard® FDA has superior anti-wear properties and provides superior protection to bearings, gears, etc.
- **Rapidly Separates from Water**
Poly-Guard® FDA rapidly and completely separates from water, which is easily drained from the bottom of the oil reservoir.
- **Longer Oil Life**
Poly-Guard® FDA has excellent oxidation stability that greatly extends oil change intervals while keeping equipment clean.
- **Multi-Temperature Performance**
Poly-Guard® FDA is stable at high temperatures and extremely fluid at low temperatures.
- **Excellent Corrosion Protection**
Poly-Guard® FDA protects ferrous and non-ferrous metals against rust and corrosion.
- **Lower Coefficient of Friction**
Poly-Guard® FDA saves energy.
- **High Purity**
Poly-Guard® FDA meets the FDA CFR Title 21 Section 178.3620(b) purity requirement and is USDA H-1 approved.
- **Compatible with Elastomers**
Poly-Guard® FDA has excellent compatibility with most elastomers.
- **Compatible with Other Oils**
Poly-Guard® FDA is compatible and can be mixed with other mineral oils and most synthetic oils. (It is not compatible with silicone or glycol synthetics.)
- **Environmentally Responsible**
Poly-Guard® FDA components are TSCA listed and meet EPA, RCRA and OSHA requirements. Poly-Guard® FDA extends oil drain intervals, eliminates premature oil changes, decreases the amount of oil purchased and disposed of and conserves energy.

| Typical Properties* | ISO Grade | | | | | | | | | | |
|---------------------------|-----------|------|------|------|------|------|------|------|------|------|------|
| | 15 | 22 | 32 | 46 | 68 | 100 | 150 | 220 | 320 | 460 | 680 |
| AGMA Grade | — | — | — | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Viscosity | | | | | | | | | | | |
| cSt @ 40°C | 15 | 22 | 32 | 46 | 68 | 100 | 150 | 220 | 320 | 460 | 680 |
| cSt @ 100°C | 3.6 | 4.7 | 6.0 | 7.7 | 10.0 | 12.7 | 16.5 | 20.9 | 27.0 | 33.8 | 48.8 |
| SSU @100°F | 82 | 114 | 164 | 235 | 349 | 517 | 782 | 1155 | 1690 | 2448 | 3616 |
| SSU @ 210°F | 38 | 42 | 46 | 52 | 60 | 70 | 86 | 105 | 133 | 165 | 237 |
| VI | 115 | 137 | 133 | 134 | 131 | 122 | 116 | 111 | 112 | 108 | 123 |
| Flash °F | 400 | 405 | 450 | 450 | 485 | 445 | 480 | 480 | 475 | 475 | 480 |
| Pour Point °F | -60 | -60 | -50 | -45 | -40 | -40 | -40 | -30 | -30 | -25 | -20 |
| Corrosion Test | | | | | | | | | | | |
| Copper, 3 hrs. @ 100°C | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a | 1a |
| Foam Tendency Seq. II | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil |
| D-1401 Demulsibility | | | | | | | | | | | |
| (40/40/0/20 max) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Pounds./Gallon | 6.74 | 6.79 | 6.88 | 6.90 | 6.92 | 7.02 | 7.08 | 7.11 | 7.14 | 7.19 | 7.10 |
| FZG Test | 9 | 10 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Four Ball EP Test, 20 kg. | 0.35 | 0.35 | 0.33 | 0.32 | 0.30 | 0.32 | 0.32 | 0.31 | 0.32 | 0.30 | 0.30 |
| TOST, hours | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |

*Properties are typical and may vary